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Abstract Of The Disclosure

A sensor element is secured in a housing by a sealing packing, for example, and has a measurement area and a lead wire area. At least one lead wire having a first electric resistance with a positive temperature coefficient to a measurement device arranged in the measurement area is provided in the lead wire area of the sensor element. The lead wire area has at least one second electric resistance having a negative temperature coefficient. The first resistance and the second resistance as well as a third resistance of the measurement device enter into a total resistance. The temperature coefficients of the first and second resistances are coordinated so that the total resistance remains at least approximately constant when there is a change in the temperature distribution in the lead wire area of the sensor element.

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